

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (currently amended) A video information editing method comprising the steps of:

delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes,

wherein the information provided includes semantic evaluation information and video characteristic items; and

selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition.

2-8 (canceled)

9. (currently amended) A video information editing method comprising the steps of:

delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one

shot with the recording position information or the time lapse information associated with the shots or scenes;

preparing an evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes,

wherein the information provided corresponding to each of the scenes includes semantic evaluation information and video characteristic items;

selecting from the regular edition video the scenes such that each of the evaluation values of the scenes satisfies a predetermined first condition;

preparing an evaluation value of each of the shots included in each of the selected scenes on the basis of the information provided corresponding to each of the shots,

wherein the information provided corresponding to each of the shots includes semantic evaluation information and video characteristic items; and

selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition.

10-32 (canceled)

33. (currently amended) A video information editing device comprising:

means for delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

means for preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes,

wherein the information provided includes semantic evaluation information and video characteristic items; and

means for selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition.

34. (original) The video information editing device as claimed in claim 33, further comprising means for calculating the sum of the time of the selected shots or scenes, and means for, if the sum of the calculated time exceeds a predetermined video time, modifying the predetermined condition and repeating the processing until the sum of the time is matched with the predetermined video time.

35. (currently amended) The video information editing device as claimed in claim 33, wherein the predetermined condition is that ~~the~~ an absolute value of the evaluation value related to the shot or the scene reaches a predetermined threshold value.

36. (currently amended) The video information editing device as claimed in claim 33, wherein the predetermined condition is that ~~the~~ an absolute value of the evaluation value related to the scene reaches a predetermined threshold value, and

wherein with respect to ~~the~~ an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and the absolute value

of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the threshold value is determined for each area between the peak or valley scene and the adjacent valley or peak scene.

37. (original) The video information editing device as claimed in claim 36, wherein the threshold value is set in accordance with the upward slope from the valley to the adjacent peak or the downward slope from the peak to the adjacent valley.

38. (original) The video information editing device as claimed in claim 35, wherein when each of the evaluation values is formed by a positive or negative value, the absolute value of the threshold value applied to the positive evaluation value is made equal to or smaller than the absolute value of the threshold value applied to the negative evaluation value.

39. (original) The video information editing device as claimed in claim 33, wherein the shot evaluation value is a value obtained by adding a value obtained by carrying out predetermined weighting on each of the video characteristic items including at least the presence of a speech, the volume of a predetermined level or higher, the appearance of a specified actor/actress, or the special picture effect in the corresponding part of the regular edition video, with respect to each of the items.

40. (original) The video information editing device as claimed in claim 39, wherein with respect to the shot evaluation value, the weighting value on the item related to the appearance of a specified actor/actress is made greater than the weighting values on the other items.

41. (currently amended) A video information editing device comprising:

means for delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

means for preparing an evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes,

wherein the information provided corresponding to each of the scenes includes semantic evaluation information and video characteristic items;

means for selecting from the regular edition video the scenes such that each of the evaluation values of the scenes satisfies a predetermined first condition;

means for preparing an evaluation value of each of the shots included in each of the selected scenes on the basis of the information provided corresponding to each of the shots,

wherein the information provided corresponding to each of the shots includes semantic evaluation information and video characteristic items; and

means for selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition.

42. (original) The video information editing device as claimed in claim 41, further comprising means for, if the length of a video produced by connecting selected shots exceeds a predetermined video time, modifying at least one of the predetermined first condition and second condition and repeating the processing until the length of the video becomes equal to the predetermined video time.

43. (currently amended) The video information editing device as claimed in claim 41, wherein the predetermined first condition is that ~~the~~ an absolute value of the scene evaluation value related to the scene reaches a predetermined threshold value, and

wherein with respect to ~~the~~ an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and the absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the threshold value is determined for each area between the peak or valley scene and the adjacent valley or peak scene.

44. (currently amended) The video information editing device as claimed in claim 41, wherein with respect to ~~the~~ an integration value of the evaluation value related to each of the scenes along

the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and the an absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the predetermined first condition is applied to the scenes on the upward slope to the peak from the adjacent valley before the peak and the scenes on the downward slope immediately after the peak, on the basis of the magnitude of the increase of the integration value of the valley scene and the adjacent peak scene after the valley, or on the basis of the ranking of the magnitude of the increase of the integration value.

45. (original) The video information editing device as claimed in claim 43, wherein the predetermined first condition is that the absolute value of the scene evaluation value related to the scenes reaches a predetermined threshold value, and the threshold value is set in accordance with the upward slope from the valley to the adjacent peak or the downward slope from the peak to the adjacent valley.

46. (original) The video information editing device as claimed in claim 43, wherein the predetermined first condition is that the absolute value of the scene evaluation value related to the scenes reaches a predetermined threshold value, and when each of the evaluation values is formed by a positive or negative value, the absolute value of the threshold value applied to the

positive evaluation value is made equal to or smaller than the absolute value of the threshold value applied to the negative evaluation value.

47. (original) The video information editing device as claimed in claim 41, wherein the shot evaluation value is a value obtained by adding a value obtained by carrying out predetermined weighting on each of the video characteristic items including at least the presence of a speech, the volume of a predetermined level or higher, the appearance of a specified actor/actress, or the special picture effect in the corresponding part of the regular edition video, with respect to each of the items.

48. (original) The video information editing device as claimed in claim 47, wherein with respect to the shot evaluation value, the weighting value on the item related to the appearance of a specified actor/actress is made greater than the weighting values on the other items.

49. (currently amended) A video information editing device comprising:

means for delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

means for preparing an evaluation value of each of the shots or each of the scenes on the basis of the information provided corresponding to each of the shots or each of the scenes.

wherein the information provided includes semantic evaluation information and video characteristic items;

means for selecting from the regular edition video the shots or the scenes such that each of the evaluation values of the shots or the scenes satisfies a predetermined condition; and

means for coding data including at least the recording position information or the time lapse information corresponding to the selected shots or scenes and the corresponding evaluation value.

50. (original) The video information editing device as claimed in claim 49, further comprising means for calculating the sum of the time of the selected shots or scenes on the basis of the recording position information or the time lapse information, and means for, if the sum of the calculated time exceeds a predetermined video time, modifying the predetermined condition and repeating the processing until the sum of the time is matched with the predetermined video time.

51. (currently amended) The video information editing device as claimed in claim 49, wherein the predetermined condition is that ~~the~~ an absolute value of the evaluation value related to the shot or the scene reaches a predetermined threshold value.

52. (currently amended) The video information editing device as claimed in claim 49, wherein the predetermined condition is that ~~the~~ an absolute value of the evaluation related to the scene reaches a predetermined threshold value, and

wherein with respect to ~~the~~ an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of

the integration value up to a scene exceeds a predetermined first gap value and the absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the threshold value is determined for each area between the peak or valley scene and the adjacent valley or peak scene.

53. (original) The video information editing device as claimed in claim 52, wherein the threshold value is set in accordance with the upward slope from the valley to the adjacent peak or the downward slope from the peak to the adjacent valley.

54. (original) The video information editing device as claimed in claim 51, wherein when each of the evaluation values is formed by a positive or negative value, the absolute value of the threshold value applied to the positive evaluation value is made equal to or smaller than the absolute value of the threshold value applied to the negative evaluation value.

55. (original) The video information editing device as claimed in claim 49, wherein the shot evaluation value is a value obtained by adding a value obtained by carrying out predetermined weighting on each of the video characteristic items including at least the presence of a speech, the volume of a predetermined level or higher, the appearance of a specified actor/actress, or the

special picture effect in the corresponding part of the regular edition video, with respect to each of the items.

56. (original) The video information editing device as claimed in claim 55, wherein with respect to the shot evaluation value, the weighting value on the item related to the appearance of a specified actor/actress is made greater than the weighting values on the other items.

57. (currently amended) A video information editing device comprising:

means for delimiting at timing of a delimiting instruction a regular edition video, constituted by continuous dynamic images recorded along with recording position information or time lapse information, into shots as units of dynamic images or into scenes each containing at least one shot with the recording position information or the time lapse information associated with the shots or scenes;

means for preparing an evaluation value of each of the scenes on the basis of the information provided corresponding to each of the scenes,

wherein the information provided corresponding to each of the scenes includes semantic evaluation information and video characteristic items;

means for selecting from the regular edition video the scenes such that each of the evaluation values of the scenes satisfies a predetermined first condition;

means for preparing an evaluation value of each of the shots included in each of the selected scenes on the basis of the information provided corresponding to each of the shots,

wherein the information provided corresponding to each of the shots includes semantic evaluation information and video characteristic items;

means for selecting the shots such that each of the evaluation values of the shots satisfies a predetermined second condition; and

means for coding the information of the recording position information or the time lapse information corresponding to each of the selected shots and data including at least the shot evaluation value.

58. (original) The video information editing device as claimed in claim 57, further comprising means for, if the length of a video produced by connecting selected shots exceeds the predetermined video time, modifying at least one of the predetermined first condition and second condition and repeating the processing until the length of the video becomes equal to the predetermined video time.

59. (currently amended) The video information editing device as claimed in claim 57, wherein the predetermined first condition is that ~~the~~ an absolute value of the scene evaluation value related to the scene reaches a predetermined threshold value, and

wherein with respect to ~~the~~ an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and the absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the threshold value is determined for each area between the peak or valley scene and the adjacent valley or peak scene.

60. (currently amended) The video information editing device as claimed in claim 57, wherein with respect to ~~the~~ an integration value of the evaluation value related to each of the scenes along the scene transition, the scene is a peak scene when the continuous increase of the integration value up to a scene exceeds a predetermined first gap value and ~~the~~ an absolute value of the continuous decrease of the integration value after that scene exceeds a predetermined second gap value,

while the scene is a valley scene when the absolute value of the continuous decrease of the integration value up to a scene exceeds a predetermined third gap value and the continuous increase of the integration value after that scene exceeds a predetermined fourth gap value, and

the predetermined first condition is applied to the scenes on the upward slope to the peak from the adjacent valley before the peak and the scenes on the downward slope immediately after the peak, on the basis of the magnitude of the increase of the integration value of the valley scene and the adjacent peak scene after the valley, or on the basis of the ranking of the magnitude of the increase of the integration value.

61. (original) The video information editing device as claimed in claim 59, wherein the predetermined first condition is that the absolute value of the scene evaluation value related to the scenes reaches a predetermined threshold value, and the threshold value is set in accordance with the upward slope from the valley to the adjacent peak or the downward slope from the peak to the adjacent valley.

62. (original) The video information editing device as claimed in claim 59, wherein the predetermined first condition is that the absolute value of the scene evaluation value related to the scenes reaches a predetermined threshold value, and when each of the evaluation values is formed by a positive or negative value, the absolute value of the threshold value applied to the positive evaluation value is made equal to or smaller than the absolute value of the threshold value applied to the negative evaluation value.

63. (original) The video information editing device as claimed in claim 59, wherein the shot evaluation value is a value obtained by adding a value obtained by carrying out predetermined weighting on each of the video characteristic items including at least the presence of a speech, the volume of a predetermined level or higher, the appearance of a specified actor/actress, or the special picture effect in the corresponding part of the regular edition video, with respect to each of the items.

64. (original) The video information editing device as claimed in claim 63, wherein with respect to the shot evaluation value, the weighting value on the item related to the appearance of a specified actor/actress is made greater than the weighting values on the other items.

65. (new) A method for generating a video comprising the steps of:

accessing a first segment of video;

establishing a plurality of shots from the first segment of video;

providing semantic evaluation information related to content of one or more of the plurality of shots;

evaluating video characteristics of one or more of the plurality of shots;

selecting particular shots as a function of the semantic evaluation information and the video characteristics; and

generating the video by concatenating the selected particular shots such that the video has a predetermined time duration.

66. (new) An apparatus for generating a video comprising:

means for accessing a first segment of video;

means for establishing a plurality of shots from the first segment of video;

means for providing semantic evaluation information related to content of one or more of the plurality of shots;

means for evaluating video characteristics of one or more of the plurality of shots;

means for selecting particular shots as a function of the semantic evaluation information and the video characteristics; and

means for generating the video by concatenating the selected particular shots such that the video has a predetermined time duration.

67. (new) The apparatus as claimed in claim 66 wherein the semantic evaluation information relates to audio information of the first segment of video.

68. (new) The apparatus as claimed in claim 66, further comprising, means for modifying the semantic evaluation information when the predetermined time duration exhibits a preset relationship to a maximum time duration.

69. (new) The apparatus as claimed in claim 66, wherein the semantic evaluation information is a function of an absolute value of content of a corresponding shot.

70. (new) The apparatus as claimed in claim 69, wherein the semantic evaluation information comprises:

an integration value related to a corresponding one of a plurality of scenes, each scene having at least one scene transition,

wherein a scene is a peak scene when an increase in the integration value exceeds a predetermined first value and when a subsequent decrease in the integration value exceeds a predetermined second value,

wherein a scene is a valley scene when a decrease in the integration value prior to said scene exceeds a predetermined third value and an increase in the integration value after said scene exceeds a predetermined fourth value.

71. (new) The apparatus as claimed in claim 70, further comprising:

means for determining a threshold value for each area between a first peak scene or a first valley scene and an adjacent valley scene or peak scene.

72. (new) The apparatus as claimed in claim 71, wherein the threshold value is determined as a function of a change in slope from a valley scene to an adjacent peak scene.

73. (new) The apparatus as claimed in claim 71, wherein the semantic evaluation information is determined by a positive or negative value, and

wherein the absolute value of the threshold value applied to the positive evaluation value is made equal to or smaller than the absolute value of the threshold value applied to the negative evaluation value.

74. (new) The apparatus as claimed in claim 66, further comprising:

means for establishing a video characteristic value for a portion of the first segment of video as a function of predetermined weighting of: presence of speech content, volume exceeding a minimum predetermined level, appearance of a specified actor/actress, or special effect.

75. (new) The apparatus as claimed in claim 74, wherein the weighting of the appearance of a specified actor/actress exceeds other weighting values.

76. (new) A computer-readable medium adapted to store a computer program comprising:

program code for accessing a first segment of video;
program code for establishing a plurality of shots from the first segment of video;
program code for providing semantic evaluation information related to content of one or more of the plurality of shots;

program code for evaluating video characteristics of one or more of the plurality of shots;
program code for selecting particular shots as a function of the semantic evaluation
information and the video characteristics; and
program code for generating video by concatenating the selected particular shots such
that the video has a predetermined time duration.